

DECLASSIFIED

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Date:

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O. I. Kimble STS, Inc.
September 11, 1992

Report No.: J098-RP
Rev. No.: 0

Summary and Recommendation

The O.I. Kimble STS, Inc. site is recommended to be **Deferred to RCRA**. There are no suspected releases of contaminants to surface water, soil, or air; however, there is a suspected release to groundwater. Mercury contaminated soil remained in place for approximately 1 year before remediation and removal from the site occurred. PCB-contaminated soil remained in place for an unknown amount of time before remediation and removal from the site occurred. During the time between the releases of mercury and PCB-containing oil to soil and remediation, contaminants could have percolated to groundwater. There are approximately 48,745 people served by groundwater within 4 miles of the site. Other waste sources are contained inside enclosed buildings on site.

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PA Scoresheets

Site Name: O. I. Kimble STS

CERCLIS ID No.: NJD002342087

Street Address: 537 Crystal Ave

City/State/Zip: Vineland NJ

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PA TABLE 1: WASTE CHARACTERISTICS (WC) SCORES

PA Table 1a: WC Scores for Single Source Sites and Formulas
for Multiple Source Sites

T I P E	SOURCE TYPE	SINGLE SOURCE SITES (assigned WC scores)			MULTIPLE SOURCE SITES
		WC = 18	WC = 32	WC = 100	
WASTE CHARACTERISTICS	N/A	≤ 100 lb	> 100 to 10,000 lb	> 10,000 lb	$B + 1$
WASTE CHARACTERISTICS	N/A	≤ 500,000 lb	> 500,000 to 50 million lb	> 50 million lb	$B + 5,000$
VOLUME	Landfill	≤ 6.75 million ft ³ ≤ 250,000 yd ³	> 6.75 million to 675 million ft ³ > 250,000 to 25 million yd ³	> 675 million ft ³ > 25 million yd ³	$ft^3 + 67,500$ $yd^3 + 2,500$
	Surface impoundment	≤ 6,750 ft ³ ≤ 250 yd ³	> 6,750 to 675,000 ft ³ > 250 to 25,000 yd ³	> 675,000 ft ³ > 25,000 yd ³	$ft^3 + 67.5$ $yd^3 + 2.5$
	Drums	≤ 1,000 drums	> 1,000 to 100,000 drums	> 100,000 drums	$drums + 10$
	Tanks and non-drum containers	≤ 50,000 gallons	> 50,000 to 5 million gallons	> 5 million gallons	$gallons + 500$
	Contaminated soil	≤ 6.75 million ft ³ ≤ 250,000 yd ³	> 6.75 million to 675 million ft ³ > 250,000 to 25 million yd ³	> 675 million ft ³ > 25 million yd ³	$ft^3 + 67,500$ $yd^3 + 2,500$
	Pile	≤ 6,750 ft ³ ≤ 250 yd ³	> 6,750 to 675,000 ft ³ > 250 to 25,000 yd ³	> 675,000 ft ³ > 25,000 yd ³	$ft^3 + 67.5$ $yd^3 + 2.5$
	Other	≤ 6,750 ft ³ ≤ 250 yd ³	> 6,750 to 675,000 ft ³ > 250 to 25,000 yd ³	> 675,000 ft ³ > 25,000 yd ³	$ft^3 + 67.5$ $yd^3 + 2.5$
AREA	Landfill	≤ 340,000 ft ² ≤ 7.8 acres	> 340,000 to 34 million ft ² > 7.8 to 780 acres	> 34 million ft ² > 780 acres	$ft^2 + 3,400$ $acres + 0.078$
	Surface impoundment	≤ 1,300 ft ² ≤ 0.029 acres	> 1,300 to 130,000 ft ² > 0.029 to 2.9 acres	> 130,000 ft ² > 2.9 acres	$ft^2 + 13$ $acres + 0.00029$
	Contaminated soil	≤ 3.4 million ft ² ≤ 78 acres	> 3.4 million to 340 million ft ² > 78 to 7,800 acres	> 340 million ft ² > 7,800 acres	$ft^2 + 34,000$ $acres + 0.78$
	Pile*	≤ 1,300 ft ² ≤ 0.029 acres	> 1,300 to 130,000 ft ² > 0.029 to 2.9 acres	> 130,000 ft ² > 2.9 acres	$ft^2 + 13$ $acres + 0.00029$
	Land treatment	≤ 27,000 ft ² ≤ 0.62 acres	> 27,000 to 2.7 million ft ² > 0.62 to 62 acres	> 2.7 million ft ² > 62 acres	$ft^2 + 270$ $acres + 0.0062$

1 ton = 2,000 lb = 1 yd³ = 4 drums = 200 gallons

* Use area of land surface under pile, not surface area of pile.

PA Table 1b: WC Scores for Multiple Source Sites

WC Total	WC Score
≤ 0 to 100	18
> 100 to 10,000	32
> 10,000	100

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SOURCE EVALUATION

Source No.: 1	Source Name: Drums	Source Waste Quantity (WQ) Calculations: 940 pounds of Hydrofluoric Acid 10700 pounds of Chromium containing ceramic wasters 13728 pounds of PCB contaminated oil. <hr/> 25368 total Waste Stream pounds $25368 \div 5,000 = 5$
Source Description: All drummed wastes are stored in the hazardous waste storage building on dike, concrete flooring surrounded by a fence awaiting removal from the site.		

Source No.: 2	Source Name: Contaminated Soil	Source Waste Quantity (WQ) Calculations: 720 cubic yards of mercury contaminated soil. 6 cubic yards of PCB contaminated soil <hr/> 726 total cubic yards $726 \div 2,500 = 0.30$
Source Description: Post excavation samples indicated residual levels of mercury and PCB-contamination after removal of the soil from the site.		

Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations: $5 + .30 = 5.30$
Source Description:		

Site WC:
18

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GROUND WATER PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Ground Water Pathway Criteria List, page 7)?	Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>
Is the site located in karst terrain?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Depth to aquifer:	8-25 ft
Distance to the nearest drinking water well:	on site ft

LIKELIHOOD OF RELEASE

- SUSPECTED RELEASE:** If you suspect a release to ground water (see page 7), assign a score of 550. Use only column A for this pathway.
- NO SUSPECTED RELEASE:** If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.

	A Suspected Release	B No Suspected Release	Reference
1. SUSPECTED RELEASE: If you suspect a release to ground water (see page 7), assign a score of 550. Use only column A for this pathway.	550		47, p. 26
2. NO SUSPECTED RELEASE: If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.			
LR =	550		

TARGETS

- PRIMARY TARGET POPULATION:** Determine the number of people served by drinking water wells that you suspect have been exposed to a hazardous substance from the site (see Ground Water Pathway Criteria List, page 7).
_____ people $\times 10 =$
- SECONDARY TARGET POPULATION:** Determine the number of people served by drinking water wells that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 2.
Are any wells part of a blended system? Yes ☐ No ☐
If yes, attach a page to show apportionment calculations.
- NEAREST WELL:** If you have identified a primary target population for ground water, assign a score of 50; otherwise, assign the Nearest Well score from PA Table 2. If no drinking water wells exist within 4 miles, assign a score of zero.
- WELLHEAD PROTECTION AREA (WHPA):** If any source lies within or above a WHPA, or if you have identified any primary target well within a WHPA, assign a score of 20; assign 5 if neither condition holds but a WHPA is present within 4 miles; otherwise assign zero.
- RESOURCES**

0			
1043			41
20			14
0			
5			14
T =	1068		

WASTE CHARACTERISTICS

- If you have identified any primary target for ground water, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.
- If you have NOT identified any primary target for ground water, assign the waste characteristics score calculated on page 4.

18		
WC =	18	

GROUND WATER PATHWAY SCORE:

LR \times T \times WC
82,500

Subject to a maximum of 1000
100

PA TABLE 2: VALUES FOR SECONDARY GROUND WATER TARGET POPULATIONS

Distance from Site	Population	Nearest Well (choose highest)	Population Served by Wells Within Distance Category											Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000		
0 to 1/4 mile	<u>1129</u>	(20)	1	2	5	18	52	(183)	521	1,533	5,214	18,325	<u>163</u>	
> 1/4 to 1/2 mile	<u>104</u>	18	1	1	3	(10)	32	101	323	1,012	3,233	10,121	<u>10</u>	
> 1/2 to 1 mile	<u>11663</u>	9	1	1	2	5	17	52	167	(522)	1,668	5,224	<u>522</u>	
> 1 to 2 miles	<u>6377</u>	5	1	1	1	3	9	29	(94)	294	939	2,938	<u>94</u>	
> 2 to 3 miles	<u>23588</u>	3	1	1	1	2	7	21	68	(212)	678	2,122	<u>212</u>	
> 3 to 4 miles	<u>6977</u>	2	1	1	1	1	4	13	(42)	131	417	1,308	<u>42</u>	
Nearest Well =		<u>20</u>												Score = <u>1043</u>

Distance from Site	Population	Nearest Well (use 20 for karst)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	
0 to 1/4 mile	_____	20	1	2	5	16	52	163	521	1,633	5,214	16,326	_____
> 1/4 to 1/2 mile	_____	20	1	1	3	10	32	101	323	1,012	3,233	10,121	_____
> 1/2 to 1 mile	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 1 to 2 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 2 to 3 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 3 to 4 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
Nearest Well = _____													Score = _____

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**SURFACE WATER PATHWAY
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT SCORESHEET**

Pathway Characteristics	
Do you suspect a release (see Surface Water Pathway Criteria List, page 11)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Distance to surface water:	3960 ft
Flood frequency:	outside 500 yrs
What is the downstream distance to the nearest drinking water intake? <u>N/A</u> miles	
Nearest fishery? <u>0.6</u> miles	Nearest sensitive environment? <u>1.78</u> miles

LIKELIHOOD OF RELEASE

1. **SUSPECTED RELEASE:** If you suspect a release to surface water (see page 11), assign a score of 550. Use only column A for this pathway.
2. **NO SUSPECTED RELEASE:** If you do not suspect a release to surface water, use the table below to assign a score based on distance to surface water and flood frequency. Use only column B for this pathway.

Distance to surface water \leq 2,500 feet	500
Distance to surface water $>$ 2,500 feet, and	
Site in annual or 10-year floodplain	500
Site in 100-year floodplain	400
Site in 500-year floodplain	300
Site outside 500-year floodplain	100

	A <small>Suspected Release</small>	B <small>No Suspected Release</small>		
	550	100		
LR =		100		10, 20

DRINKING WATER THREAT TARGETS

3. Record the water body type, flow (if applicable), and number of people served by each drinking water intake within the target distance limit. If there is no drinking water intake within the target distance limit, factors 4, 5, and 6 each receive zero scores.

Intake Name	Water Body Type	Flow	People Served
NONE			

4. **PRIMARY TARGET POPULATION:** If you suspect any drinking water intake listed above has been exposed to a hazardous substance from the site (see Surface Water Pathway Criteria List, page 11), list the intake name(s) and calculate the factor score based on the total population served.

_____ people \times 10 =

5. **SECONDARY TARGET POPULATION:** Determine the number of people served by drinking water intakes that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 3.

Are any intakes part of a blended system? Yes ☐ No ☐
If yes, attach a page to show apportionment calculations.

6. **NEAREST INTAKE:** If you have identified a primary target population for the drinking water threat (factor 4), assign a score of 50; otherwise, assign the Nearest Intake score from PA Table 3. If no drinking water intake exists within the target distance limit, assign a score of zero.

7. RESOURCES

T =		5		14

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PA TABLE 3: VALUES FOR SECONDARY SURFACE WATER TARGET POPULATIONS

Surface Water Body Flow (see PA Table 4)	Population	Nearest Intake (choose N/pest)	Population Served by Intakes Within Flow Category											Population Value
			1 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	Greater than 1,000,000	
<10 cfs	_____	20	2	5	10	52	163	521	1,633	5,214	16,325	52,136	163,248	_____
10 to 100 cfs	_____	2	1	1	2	5	16	52	163	521	1,633	5,214	16,325	_____
>100 to 1,000 cfs	_____	1	0	0	1	1	2	5	16	52	163	521	1,633	_____
>1,000 to 10,000 cfs	_____	0	0	0	0	0	1	1	2	5	16	52	163	_____
>10,000 cfs or Great Lakes	_____	0	0	0	0	0	0	0	1	1	2	5	16	_____
3-mile Mixing Zone	_____	10	1	3	8	26	82	261	816	2,607	8,162	26,068	81,663	_____
Nearest Intake =		_____	Score =											_____

**PA TABLE 4: SURFACE WATER TYPE / FLOW CHARACTERISTICS
WITH DILUTION WEIGHTS FOR SECONDARY SURFACE WATER SENSITIVE ENVIRONMENTS**

Type of Surface Water Body		Dilution Weight
Water Body Type	Flow	
minimal stream	< 10 cfs	1
small to moderate stream	10 to 100 cfs	0.1
moderate to large stream	> 100 to 1,000 cfs	N/A
large stream to river	> 1,000 to 10,000 cfs	N/A
large river	> 10,000 cfs	N/A
3-mile mixing zone of quiet flowing streams or rivers	10 cfs or greater	N/A
coastal tidal water (harbors, sounds, bays, etc.), ocean, or Great Lakes	N/A	N/A

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SURFACE WATER PATHWAY (continued)
HUMAN FOOD CHAIN THREAT SCORESHEET

LIKELIHOOD OF RELEASE		A Suspected Release <small>see</small>	B No Suspected Release <small>see, table 10</small>	References
Enter Surface Water Likelihood of Release score from page 12.	LR =	.	100	

HUMAN FOOD CHAIN THREAT TARGETS

8. Record the water body type and flow (if applicable) for each fishery within the target distance limit. If there is no fishery within the target distance limit, assign a Targets score of 0 at the bottom of the page.

Fishery Name	Water Body Type	Flow
Blackwater Branch	med. stream	10-100 cfs
Maurice River	large stream	280.75 cfs
Union Lake	open water	280.75 cfs
Maurice River	large stream	317.12 cfs
		cfs

9. PRIMARY FISHERIES: If you suspect any fishery listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 10. List the primary fisheries:
- _____
- _____

10. SECONDARY FISHERIES

- A. If you suspect a release to surface water and have identified a secondary fishery but no primary fishery, assign a score of 210.
- B. If you do not suspect a release, assign a Secondary Fisheries score from the table below using the lowest flow at any fishery within the target distance limit.

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
> 100 cfs, coastal tidal waters, oceans, or Great Lakes	12

T =

	TOTAL = 30
	30
	TOTAL = 30

15, 16, 19

SURFACE WATER PATHWAY (continued)
ENVIRONMENTAL THREAT SCORESHEET

Enter Surface Water Likelihood of Release score from page 12.

U =

References

11. Record the water body type and flow (if applicable) for each surface water sensitive environment within the target distance limit (see PA Tables 4 and 5). If there is no sensitive environment within the target distance limit, assign a Targets score of 0 at the bottom of the page.

45, 46

12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate factor 13. List the primary sensitive environments:

13. **SECONDARY SENSITIVE ENVIRONMENTS:** If sensitive environments are present, but none is a primary sensitive environment, evaluate Secondary Sensitive Environments based on flow.

- A. For secondary sensitive environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Sin

8. If all secondary sensitive environments are located on surface water bodies with flows > 100 cfs, assign a score of 10.

I =

15, 16, 19
45, 46

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PA TABLE 5: SURFACE WATER AND AIR PATHWAY SENSITIVE ENVIRONMENTS VALUES

<i>Sensitive Environment</i>	<i>Assigned Value</i>
Critical habitat for Federally designated endangered or threatened species	100
Menne Sanctuary	
National Park	
Designated Federal Wilderness Area	
Ecologically important areas identified under the Coastal Zone Wilderness Act	
Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act	
Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes)	
National Monument (air pathway only)	
National Seashore Recreation Area	
National Lakeshore Recreation Area	
Habitat known to be used by Federally designated or proposed endangered or threatened species	75
National Preserve	
National or State Wildlife Refuge	
Unit of Coastal Barrier Resources System	
Federal land designated for the protection of natural ecosystems	
Administratively Proposed Federal Wilderness Area	
Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay, or estuary	
Migratory pathways and feeding areas critical for the maintenance of anadromous fish species in a river system	
Terrestrial areas utilized for breeding by large or dense aggregations of vertebrate animals (air pathway) or semi-aquatic foragers (surface water pathway)	
National river reach designated as Recreational	
Habitat known to be used by State designated endangered or threatened species	50
Habitat known to be used by a species under review as to its Federal endangered or threatened status	
Coastal Barrier (partially developed)	
Federally designated Scenic or Wild River	
State land designated for wildlife or game management	25
State designated Scenic or Wild River	
State designated Natural Area	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	5
State designated areas for protection/maintenance of aquatic life under the Clean Water Act	
Wetlands	See PA Table 6 (Surface Water Pathway) or PA Table 9 (Air Pathway)

PA TABLE 6: SURFACE WATER PATHWAY
WETLANDS FRONTAGE VALUES

<i>Total Length of Wetlands</i>	<i>Assigned Value</i>
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 18 miles	350
Greater than 18 to 20 miles	450
Greater than 20 miles	500

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**SURFACE WATER PATHWAY (concluded)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY**

	A <i>Suspected Release</i> <small>(N/A = 0)</small>	B <i>No Suspected Release</i> <small>(N/A = 0)</small>
WASTE CHARACTERISTICS		
14. A. If you have identified any primary target for surface water (pages 12, 14, or 15), assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	(N/A = 0)	
B. If you have NOT identified any primary target for surface water, assign the waste characteristics score calculated on page 4.	(N/A = 0)	18
WC =		18

SURFACE WATER PATHWAY THREAT SCORES

Threat	<i>Likelihood of Release (LR) Score</i> <small>(from page 12)</small>	<i>Targets (T) Score</i> <small>(pages 12, 14, 15)</small>	<i>Pathway Waste Characteristics (WC) Score</i> <small>(determined above)</small>	<i>Threat Score</i> $LR \times T \times WC$ <small>/ 82,500</small>
Drinking Water	100	5	18	0.109 <small>Subject to a maximum of 1.00</small>
Human Food Chain	100	30	18	6.55 <small>Subject to a maximum of 1.00</small>
Environmental	100	10	18	0.218 <small>Subject to a maximum of 1.00</small>

SURFACE WATER PATHWAY SCORE
(Drinking Water Threat + Human Food Chain Threat + Environmental Threat)

<small>Subject to a maximum of 1.00</small> <div style="font-size: 1.5em; font-weight: bold;">6.90</div>

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SOIL EXPOSURE PATHWAY SCORESHEET

Pathway Characteristics	
Do any people live on or within 200 ft of areas of suspected contamination?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Do any people attend school or daycare on or within 200 ft of areas of suspected contamination?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is the facility active? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, estimate the number of workers: <u>1100</u>	

LIKELIHOOD OF EXPOSURE

1. SUSPECTED CONTAMINATION: Surficial contamination can generally be assumed, and a score of 550 assigned. Assign zero only if the absence of surficial contamination can be confidently demonstrated.

LE =

Suspected Contamination
550

References

RESIDENT POPULATION THREAT TARGETS

2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or daycare on or within 200 feet of areas of suspected contamination (see Soil Exposure Pathway Criteria List, page 18).

_____ people x 10 =

0

44

3. RESIDENT INDIVIDUAL: If you have identified a resident population (factor 2), assign a score of 50; otherwise, assign a score of 0.

0

4. WORKERS: Use the following table to assign a score based on the total number of workers at the facility and nearby facilities with suspected contamination:

Number of Workers	Score
0	0
1 to 100	5
101 to 1,000	10
> 1,000	15

15

44

5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Use PA Table 7 to assign a value for each terrestrial sensitive environment on an area of suspected contamination:

Terrestrial Sensitive Environment Type	Value

Sum =

0

6. RESOURCES

5

T =

20

WASTE CHARACTERISTICS

7. Assign the waste characteristics score calculated on page 4.

WC =

18

RESIDENT POPULATION THREAT SCORE:

$$\frac{LE \times T \times WC}{82,500}$$

2.4

NEARBY POPULATION THREAT SCORE:

2

SOIL EXPOSURE PATHWAY SCORE:
Resident Population Threat + Nearby Population Threat

4.4

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PA TABLE 7: SOIL EXPOSURE PATHWAY
TERRESTRIAL SENSITIVE ENVIRONMENT VALUES

<i>Terrestrial Sensitive Environment</i>	<i>Assigned Value</i>
Terrestrial critical habitat for Federally designated endangered or threatened species	100
National Park	
Designated Federal Wilderness Area	
National Monument	
Terrestrial habitat known to be used by Federally designated or proposed threatened or endangered species	75
National Preserve (terrestrial)	
National or State terrestrial Wildlife Refuge	
Federal land designated for protection of natural ecosystems	
Administratively proposed Federal Wilderness Area	
Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	
Terrestrial habitat used by State designated endangered or threatened species	50
Terrestrial habitat used by species under review for Federal designated endangered or threatened status	
State lands designated for wildlife or game management	25
State designated Natural Areas	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	

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AIR PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Air Pathway Criteria List, page 21)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Distance to the nearest individual:	0 ft

LIKELIHOOD OF RELEASE

1. **SUSPECTED RELEASE:** If you suspect a release to air (see page 21), assign a score of 550. Use only column A for this pathway.
2. **NO SUSPECTED RELEASE:** If you do not suspect a release to air, assign a score of 500. Use only column B for this pathway.

	A	B	References
	Suspected Release	No Suspected Release	
		500	
LR =		500	

TARGETS

3. **PRIMARY TARGET POPULATION:** Determine the number of people subject to exposure from a suspected release of hazardous substances to the air.
_____ people $\times 10 =$
4. **SECONDARY TARGET POPULATION:** Determine the number of people not suspected to be exposed to a release to air, and assign the total population score using PA Table 8.
5. **NEAREST INDIVIDUAL:** If you have identified any Primary Target Population for the air pathway, assign a score of 50; otherwise, assign the Nearest Individual score from PA Table 8.
6. **PRIMARY SENSITIVE ENVIRONMENTS:** Sum the sensitive environment values (PA Table 5) and wetland acreage values (PA Table 9) for environments subject to exposure from a suspected release to the air.

Sensitive Environment Type	Value

Sum =

7. **SECONDARY SENSITIVE ENVIRONMENTS:** Use PA Table 10 to determine the score for secondary sensitive environments.
8. **RESOURCES**

T =

WASTE CHARACTERISTICS

9. **A.** If you have identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.
- B.** If you have NOT identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4.

WC =

AIR PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

Subject to a maximum of 100
25.3

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PA TABLE 8: VALUES FOR SECONDARY AIR TARGET POPULATIONS

Distance from Site	Population	Nearest Individual (choose Highest)	Population Within Distance Category													Population Value	
			1	11	31	101	301	1,001	3,001	10,001	30,001	100,001	300,001	Greater than			
			to 10	to 20	to 100	to 200	to 1,000	to 3,000	to 10,000	to 30,000	to 100,000	to 300,000	to 1,000,000	1,000,000			
Onsite	<u>1100</u>	20	1	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,248	<u>163</u>		
>0 to 1/4 mile	<u>575</u>	20	1	1	1	4	13	41	130	408	1,308	4,081	12,034	40,811	<u>13</u>		
>1/4 to 1/2 mile	<u>2088</u>	2	0	0	1	1	3	9	28	88	282	882	2,816	8,816	<u>9</u>		
>1/2 to 1 mile	<u>8775</u>	1	0	0	0	1	1	3	8	26	83	261	834	2,612	<u>8</u>		
>1 to 2 miles	<u>15302</u>	0	0	0	0	0	1	1	3	8	27	83	266	833	<u>8</u>		
>2 to 3 miles	<u>15663</u>	0	0	0	0	0	1	1	1	4	12	38	120	378	<u>4</u>		
>3 to 4 miles	<u>10466</u>	0	0	0	0	0	0	1	1	2	7	23	72	229	<u>2</u>		
Nearest Individual =		20														Score =	207

PA TABLE 9: AIR PATHWAY VALUES FOR WETLAND AREA

Wetland Area	Assigned Value
Less than 1 acre	0
1 to 50 acres	25
Greater than 50 to 100 acres	75
Greater than 100 to 150 acres	125
Greater than 150 to 200 acres	175
Greater than 200 to 300 acres	250
Greater than 300 to 400 acres	350
Greater than 400 to 500 acres	450
Greater than 500 acres	500

PA TABLE 10: DISTANCE WEIGHTS AND CALCULATIONS FOR AIR PATHWAY SECONDARY SENSITIVE ENVIRONMENTS

Distance		Sensitive Environment Type and Value (from PA Table 5 or 9)		Product
Distance	Weight			
Onsite	0.10	x		
		x		
0-1/4 mi	0.025	x		
		x		
		x		
1/4-1/2mi	0.0064	x		
		x		
		x		
		x		
Total Environments Score =				

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SITE SCORE CALCULATION

	S	S'
GROUND WATER PATHWAY SCORE (S _{gw}):	100	10,000
SURFACE WATER PATHWAY SCORE (S _{sw}):	6.90	47.61
SOIL EXPOSURE PATHWAY SCORE (S _s):	4.4	19.36
AIR PATHWAY SCORE (S _a):	25.3	640.09
SITE SCORE:	$\sqrt{\frac{S_{gw} + S_{sw} + S_s + S_a}{4}}$	51.74